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## PREVENTION OF INFANTILE BLINDNESS

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One hundred thousand <sup>1</sup> blind distributed over our great country approximately one to one thousand—does not impress the general observer as an appalling condition, but if all these could pass in review, no doubt the gravity of the situation would be more striking. If we could assemble even the percentage counted by reliable investigators as blind from preventable causes (accident, disease, etc.)—some forty thousand in number—they would make a formidable assemblage, and present a never-to-be-forgotten example of the results of ignorance and neglect.

Confining our inquiries to ophthalmia neonatorum, "the purulent sore eyes of new-born babies," we find that to this is attributable from one-tenth to one-eighth of all blindness from all causes. Ten thousand persons are blind from this one preventable disease alone.

Private charity is erecting nurseries for the care of blind infants, 50 per cent. of whom are sightless because of the ravages of this disease. One-fourth to one-third of all the children in our great public and private institutions maintained for the special education of blind youth are there as a result of this same disease. The public is further taxed to maintain the burden of the support of these blind children when they reach adult life, and in some instances pensions are granted.

The blind themselves are making a most courageous struggle for self-support in the face of an inexpressibly heavy handicap. The deprivations of the loss of sight to the blind cannot be estimated. "What blindness means to an intelligent, capable man or woman," to quote the words of a blind man who has, in the face of heavy odds,

<sup>1</sup> It is pretty generally conceded that there are 100,000 blind in the United States. The absence of any authoritative definition of blindness accounts for the lack of agreement between the Federal and State Censuses and for the discrepancy in figures quoted by various writers. Those interested in this phase of the subject should study the definition and classification of blindness under the three captions: (1) Total or absolute blindness; (2) relative blindness; (3) practical blindness as worked out by Dr. Lewis Striker, of Cincinnati.

taken his place in the world with signal success, "is something which only the Lord and the devil and those who endure it know anything about; in their blackest nightmares, those with sight cannot even faintly imagine it, and unemployed blindness is as much worse, as despair is worse than hope." The cost to the State of maintaining a blind person throughout the duration of his life is, owing to incomplete data, difficult to compute, but approximates roughly \$10,000. Of the ten thousand blind from ophthalmia neonatorum, all are probably dependent through childhood and youth; some pass directly from the school to a home, and are thus supported by private or public funds through their entire lives; others become self-supporting, and some partially so, through adult life. Again, others, after leaving the school, maintain themselves during the so-called working period, but have not been able to provide for old age, and again fall back upon state or other charitable aid. The expense is so distributed, and the appeal to the sympathies of legislators and philanthropists to "pity the poor blind" so compelling, that the aggregate amount expended is rarely considered.

For the education and maintenance of the victims of ophthalmia neonatorum attending the state schools for the blind in Massachusetts, New York, Ohio and Pennsylvania, the annual expenditure of public funds in excess of the cost of educating the same number of seeing children in the public schools is approximately \$110,000. If all the figures were available, the total annual excess cost in these four States for the education and maintenance of children, blind from this one preventable cause, would not fall far short of \$150,000. Less than one-tenth of this amount would amply provide for the free distribution of a prophylactic against ophthalmia neonatorum, basing the estimate on present expenditures in States where such distribution is in force.<sup>2</sup> But it must be remembered that if we had the figures showing the expense for the maintenance of the adults who were blinded in babyhood from ophthalmia neonatorum, \$150,000 would not begin to cover the annual cost of the needlessly blind in these four States alone. A very large majority of the ten thousand blinded from this cause are now beyond school age.

The ignorant idea of disease as representing the chastening dispensation of Providence, and as such to be meekly borne, is happily being dispelled; although we are brought face to face with

<sup>2</sup> In the states in which such provision exists New York estimates the cost at \$5000, Massachusetts at \$2500, Rhode Island \$300 to \$400, Ohio \$1200.

such evidence to the contrary, as in the case of three children by the same parents blinded from ophthalmia neonatorum, whose mother accepted the repeated afflictions as "the will of God," still, the inalienable right of every child to a fair start in the race of life is slowly gaining recognition.

It is necessary to face the facts; to make known the true cause of this disease, ophthalmia neonatorum; and arouse parents and those caring for infants to a realization of its perils, if we are to secure prompt and expert treatment for those afflicted—if we would give even a fighting chance to the one to two per cent. of live births afflicted with ophthalmia neonatorum.

It is not the purpose of this paper, however, to attempt a scientific treatise on ophthalmia neonatorum, or on the technique of its treatment or prevention, but, rather, to call attention to the prevalence of the disease, the needlessness of its cruel blight on innocent lives, and the measures that are being taken to check its pitiful havoc in the United States.<sup>3</sup>

A brief paper which admirably summarizes the historical and medical aspects of this subject, and from which we have quoted freely, was read by George F. Keiper, A. M., M. D., before the Indiana State Medical Association, September 28, 1910. As Doctor Keiper remarks, "ophthalmia neonatorum is as old as medicine," although it was a long time before the true cause of the disease was discovered, but, now that certain facts are established beyond dispute, "the problem of prevention," as Helen Keller says, "should be dealt with frankly. The facts are not agreeable reading, often they are revolting."

While other bacteria may be the cause of the disease, infantile ophthalmia results, in most cases, from gonorrhœal<sup>4</sup> infection, usually innocently acquired, the destructive germs in the leucorrhœal discharge of the mother getting in the eyes of the child, with few exceptions, during or shortly after birth.

<sup>3</sup> A bibliography of over 300 articles and books upon this subject is in course of preparation by the Pittsburg Carnegie Library, and will be invaluable for students of this subject. For a study of the movement in the United States the reader is especially referred to the writings of Dr. Lucien Howe, the pioneer in securing legislation for the prevention of ophthalmia neonatorum in this country, and to those of Dr. F. Park Lewis, who is the inspiration of the present agitation.

<sup>4</sup> The most conservative authorities state that the gonococcus is responsible for two-thirds of all cases of ophthalmia neonatorum. Other investigators place the percentage much higher.

It is an infectious, contagious disease, accompanied with the secretion of pus from between the eyelids, manifesting itself usually from a few hours to a few days after the birth of the child, and, when left untreated, results in great damage to, if not destruction of, the child's eyesight.

Ten thousand blind because of this disease!<sup>5</sup> But the movement to eradicate this evil is a campaign of hope—for the cases that do not respond to proper treatment are so rare as to be left out of the reckoning, and 99½ times out of 100 the infection is preventable.

The two factors in the treatment of this disease—cleanliness and the destruction of the fatal germs and resultant inflammation—require the most skillful, persistent nursing and expert medical attention.

The correct use of the right prophylactic, one of the silver salts, can only be intrusted to an expert. But, better than treatment, with its uncertainties, is prevention. The writings of Benjamin Gibson, of Edinburgh, produced in 1807, sound as if written to-day, for he says: "(1) Remove the disease, if possible, in the mother during pregnancy; (2) if that cannot be accomplished, remove artificially as much of the discharge as possible from the vagina at the time of delivery; (3) at all events, pay particular attention to the eyes of the child by washing them immediately after delivery with a liquid calculated to remove the offending matter or to prevent its noxious action." This was written long before it was known that the gonococcus or any other germ was the cause of the disease. But, unfortunately, the books on medicine generally made little or no mention of ophthalmia neonatorum nor its dangers. In 1874, or thereabouts, various forms of disinfectants are known to have been used as preventives. In 1879 Neisser discovered gonococcus in the secretions of the eyes of children affected with ophthalmia, but it was left to Prof. Carl Credé, director of the Maternity Hospital, University of Leipsic, during the years 1880-1882, to systematize a means of preventing the dreaded disease, and thus to confer upon succeeding generations an everlasting benefit.

<sup>5</sup> For "histories" of cases pathetic in the extreme, tragic in number, see "Needlessly Blind for Life," Bulletin No. 1, Massachusetts Commission for the Blind, and Reports of Social Service Work at Massachusetts Charitable Eye and Ear Infirmary, Boston, Mass.

The method, as described in his own words, follows: "The eyelids were gently separated by an assistant, and by means of a glass rod a single drop of the solution was placed in each eye. For twenty-four hours after the application the eyes were cooled by means of a linen fold, soaked in salicylic acid (2:100) laid over them." The percentage of babies contracting the disease rapidly fell when the Credé formula was adopted.<sup>6</sup>

The method now used consists in simply applying a 1-per-cent. solution of the nitrate of silver, one application dropped in each eye, and nothing else afterward. Doctor Howe says: "As this solution of silver removes the superficial layer of epithelial cells, it probably destroys, at the same time, any germs which may be in them. Whatever theory there may be as to how the nitrate of silver acts, there is, fortunately, no question as to the practical results. This has been determined by exactly recorded cases, which can be counted by the thousands; not observed by one practitioner, but by many; and especially we have lists showing the effect of treatment without this method, as well as with it."

In 1887 Dr. Lucien Howe, of Buffalo, N. Y., chairman of the Committee on Ophthalmia Neonatorum, of the American Ophthalmological Society, presented to that body, and to the New York State Medical Society, a masterly array of facts concerning the prevalence of ophthalmia neonatorum and the means adopted for its regulation in European countries together with what statistics were available in the United States. The conclusions drawn from his examination of the pupils in the New York State School at Batavia were especially pertinent. Doctor Howe did not succeed in legislating for compulsory prophylaxis, but, as a consequence of his earnest work, the New York Legislature, in 1890, enacted a measure (amended in 1892), requiring that the birth infection of the eyes of infants be reported to boards of health.<sup>7</sup>

<sup>6</sup>We are told that in 1874 there were in his hospital 323 births, with forty-five cases of ophthalmia neonatorum—i. e., 13.6 per cent.; and in 1882, with 260 cases in which the method was used, but one case developed—i. e., 0.5 per cent. From 1880 to 1883 the percentage ranged from .49 per cent. to zero. In three years 1160 children were born alive and but one, or at most, two cases showed the disease. Lucien Howe ("New York State Journal of Medicine," 1906) collected statistics of 1776 cases having no prophylactic treatment and 9.2 per cent. developed the disease, and of 24,724 treated by the Credé method only .65 per cent. developed the disease.

<sup>7</sup>New York "Howe" Law:

1. New York State Midwife Law (extract from Penal Code), Chapter 325, Laws of 1892.

This bill soon became known as the Howe law and was copied by sixteen other States. Legislation so fundamental in its requirements, and marking the first step in concerted action looking toward the prevention of blindness in the United States, was accorded hearty indorsement by the ophthalmologists, but was overlooked or soon forgotten by the general practitioner. While our ablest ophthalmologists are the first to deplore the fact that "we have no standard by which may be determined the qualifications of a physician who undertakes such expert and delicate work, and work requiring such precise and technical knowledge as ophthalmology," it is to these men that we owe the inception of the campaign for prevention. Professional etiquette has too long held them from arraigning the medical profession. A moment's reflection will show that, as the germs may not manifest their presence for several days, occasionally, even so late as the tenth or twelfth day after birth, the disease may reach a critical condition without attracting the attention of any one competent to realize the danger to the child's eyesight, especially where the doctor's visits are infrequent, or the accoucheur or midwife does not see the child after officiating at its delivery.

Who is responsible for the ignorance and neglect which perpetuates this needless crippling of human life? It is clear who pays the penalty—the helpless babies.

Laws, unless enforced by an enlightened public conscience, do not avail, and not until the dawn of the twentieth century have the people been alive to public health measures. To Dr. F. P. Lewis, for many years president of the Board of Trustees of the New York State School, at Batavia, and chairman of the New York State Commission to investigate the condition of the blind (1903-1906), came the inspiration of a national, and possibly international, campaign for the prevention of blindness. He has subsequently blazed the path for such a far-reaching movement, the first step of which

2. Section 288. Unlawfully omitting to provide for child. A person who . . .

3. Being a midwife, nurse or other person having the care of an infant within the age of two weeks neglects or omits to report immediately to the health officer or to a legally qualified practitioner of medicine of the city, town or place where such child is being cared for, the fact that one or both eyes of such infant are inflamed or reddened whenever such shall be the case, or who applies any remedy therefor without advice, or except by the direction of such officer or physician; or

4. Neglects, refuses or omits to comply with any provision of this section or who violates the provisions of such license, is guilty of a misdemeanor.

was taken in 1906, when the American Medical Association<sup>8</sup> appointed a committee, consisting of an ophthalmologist, an obstetrician and a sanitarian, with Doctor Lewis as chairman, "to carry out, through the associated medical organizations of the nation, measures for the prevention and control of birth infections."

The above-named committee, in their report to the House of Delegates of the American Medical Association, in 1908, which was unanimously approved by that body, and also, later, by the American Academy of Ophthalmology and Oto-Laryngology, made detailed recommendations, which may be summarized as follows:

(1) Require registration of births; licensed midwives, to be under control of board of health; they and physicians being required to report each case of disease.

(2) Let boards of health issue circulars of instruction to midwives and mothers.

(3) Let health boards circulate tubes containing prophylactic, with directions for use.

(4) Insist on complete records in all hospitals and maternity institutions.

(5) Periodic reports by all physicians on all cases treated.

(6) Educate the public.

(7) Organize the medical profession throughout the country.

(The suggestions have reference to ophthalmia neonatorum only.)

The state committees of physicians suggested in the last recommendation (No. 7) were appointed, and the next step was to secure the co-operation of a national lay organization to promote this preventive work. Accordingly, in December, 1909, the chairman of the Committee on Ophthalmia Neonatorum of the American Medical Association<sup>9</sup> applied to the Russell Sage Foundation, which had, in 1908, in consequence of the interest aroused by the New York commission's report which appeared in 1907, created a committee on prevention of blindness, with Miss Louisa Lee Schuyler as chairman. This committee, except for its part in the formation of the special committee now working under the auspices of the New

<sup>8</sup> The American Medical Association, probably the strongest professional society in the country has a membership of between 20,000 and 30,000 physicians, and through its organ, the "Journal," it reaches 53,000 physicians.

<sup>9</sup> This committee is now known as a Committee on Prevention of Blindness.



York Association for the Blind, and organized for preventive work in the State of New York, had thus far remained inactive, but responded at once to Doctor Lewis' request, appropriated funds and, later, chose an able secretary, Samuel Ely Eliot, with headquarters at 105 East Twenty-second Street, New York City. Mr. Eliot is now traveling through the West, organizing, with the indorsement of the medical profession, co-operative committees for the prevention of blindness in those States where no work of the kind exists.

Previous to this time, and acting upon a suggestion made by Miss Lucy Wright, the general superintendent of the Massachusetts Commission for the Blind, the Russell Sage Foundation Committee, in February, 1910, called a conference for the purpose of pooling the information and experience acquired in the several States already carrying on preventive work. A second conference was held, December, 1910, and resulted in the formation of a national association for the prevention of blindness and conservation of vision. This body invites the co-operation of societies now in existence, or hereafter formed, for advancing the welfare of the blind; for the promotion of social purity and sex education; for preventing infant mortality, and for safeguarding industrial occupations. In addition, this association asks the aid and indorsement of state and national medical societies, of the National Educational Association and other educational bodies, of the public and private schools for the blind, of commercial bodies, of labor organizations, of women's clubs, and of all the other organizations dealing with social and economic problems in:

- (1) The prevention of infantile blindness.
- (2) The prevention of blindness from industrial and other accidents and from disease.
- (3) The conservation of vision through improved hygiene during school life, and in industrial occupations.

Ophthalmia neonatorum as a cause of blindness is the first to be attacked, because of its susceptibility to legislative regulations. New York State, as has been mentioned, has a special committee and executive secretary to carry on this work, and has a collection of lantern slides and photographs, the latter of which have been loaned to numerous States as a traveling exhibit.<sup>10</sup> Massachusetts,

<sup>10</sup> Loan Exhibit and lantern-slide circular of Committee on Prevention of Blindness, New York Association for the Blind.

under the direction of the State Commission, employs a field agent for prevention of blindness and conservation of eyesight.<sup>11</sup> The unique social service work at the Massachusetts Eye and Ear Infirmary is referred to later. The Ohio Commission has conducted intensive lecture campaigns, supplemented with extensive newspaper stories circulated through the State Press Association. Maryland has an association devoting its entire attention to the prevention of blindness, and the Pennsylvania Association for the Blind makes work for prevention one of its important activities.

It has been the general belief that the midwives were the most culpable offenders in the eye disasters of infants. In most of our large cities and elsewhere, among the foreign-born population, a large proportion of the births are attended by these women, who, nine times out of ten, are incompetent and unclean. The 1904 records in Chicago show that 86 per cent. of all births were reported by midwives, and in New York City, in 1907, 43.5 per cent. were so reported. The investigations of Miss Elizabeth Crowell, of the New York Association of Neighborhood Workers, who personally visited five hundred midwives in their homes, brought to light indescribable conditions of filth. She found but fifty (one-tenth of the whole number interviewed) who could be qualified as capable and reliable.

The study of midwifery presented by Miss Carolyn C. Van Blarcom, the executive secretary of the Committee on Prevention of Blindness of the New York Association for the Blind, at the second Russell Sage conference, followed by the adoption of a resolution presented by Dr. William N. Studdiford, of the New York City Board of Health, to the effect that "this conference of workers for the prevention of blindness recommend that measures be taken in this country to secure state legislation which shall provide for the training, registration, licensure,<sup>12</sup> supervision, regulation and control of women engaged in the practice of midwifery," led to an offer by Dr. John Winters Brannan, president of the Board of Trustees of Bellevue and Allied Hospitals, of New York City, to co-operate in furnishing the first training for midwives in this country.

While the midwives have probably received no more condemnation than they deserve, the general practitioner, too, comes in for a generous indictment.

<sup>11</sup> See articles by Henry Copley Greene, in "New Boston."

<sup>12</sup> The license should not be regarded as a diploma, but as a sanitary police measure maintained by the board of public health.

A unique social-service work, introduced at private expense by Miss Annette P. Rogers, of the Massachusetts Commission for the Blind, and now a part of the régime of the Massachusetts Charitable Eye and Ear Infirmary,<sup>13</sup> is under the able direction of Miss Katharine Brannick, who, after a study covering three consecutive years, brought to light the startling fact that of a total of 275 carefully investigated cases<sup>14</sup> of ophthalmia neonatorum, eight births only were attended by midwives, sixty-two by hospital, dispensary, and city physicians, and 205 by private practitioners! Two cases in one year, in the practice of one man, in which both babies were blinded!

Another investigation recently made in Massachusetts, under the direction of the Boston School for Social Workers, disclosed the fact that out of ninety-seven doctors visited, with large obstetrical practice, "twenty-seven always used a prophylactic; forty, seldom; twenty-eight never used a recognized preventive, although the last admitted that they sometimes employed warm water, lemon juice, citric acid, lard, camomile tea, etc."! "Of twenty-seven cases of ophthalmia neonatorum visited by nurses in the summer of 1909, under the direction of the New York City Department of Health, twenty-two were traced to physicians and five to midwives. In thirty-three cases of ophthalmia neonatorum investigated by a field worker in the New York School of Philanthropy (1909-1910), it was found that twenty-two cases had occurred in the practice of physicians and eleven in the practice of midwives. Only one of the twenty-two physicians in question had used a prophylactic at birth, while three of the eleven midwives employed prophylaxis as a routine." Of 5,949<sup>15</sup> births in five Massachusetts cities in 1909, only 17 per cent. were given at birth any preventive treatment; 41 per cent. were attended by physicians who use a prophylactic only as their judgment dictates, and the remaining 42 per cent. were attended by physicians who never use a prophylactic for ophthalmia neonatorum.

Such facts would seem to argue strongly for the universal use of a prophylactic, for, as Doctor Richardson points out, "the possibility of any baby becoming infected at the time of confinement should be

<sup>13</sup> The Massachusetts Charitable Eye and Ear Infirmary has had since 1898 a ward devoted to the care of ophthalmia neonatorum.

<sup>14</sup> This figure does not represent the total number treated at the Massachusetts Eye and Ear Infirmary, but simply those investigated.

<sup>15</sup> Sight Saving Bulletin No. 7, Massachusetts Commission for the Blind.

constantly borne in mind, and it is desirable to carry out a routine preventive treatment in every case."

The agitation for the prevention of blindness carried on by commissions and other bodies organized to promote the interests of the blind has brought to light the Howe law in several States and secured its enactment in others. In addition, New York, Massachusetts, Ohio and Rhode Island provide, through their state boards of health, for the free distribution of a prophylactic.<sup>16</sup> While not sufficiently inclusive, both these measures are of value not only in their direct results, but in their educational bearing on the question. The latter makes easily accessible to the practitioner the means of prevention and his intelligence and conscience force him to use them in questionable cases at least. The first measure—the Howe law, although written on the statute books of seventeen States, has, unfortunately, been enforced in a few localities only. Massachusetts has one of the best of these revised laws, in that it places upon the physician, as well as other attendants, the responsibility for the report of the infection. Furthermore, it provides that, when reported, the board of health shall take such immediate action as it may deem necessary, in order that blindness may be prevented. Yet in 1907-1908—two years after the law was passed—out of forty-six investigated cases, only one was reported. During 1909-1910, in three cases resulting in blindness, a report was made to the board of health by the attending physician, and no action was taken by either to insure proper care! The excuse often given for failure to report cases of ophthalmia neonatorum is that, in so doing, unpleasant reflections may be cast upon the parents. The Massachusetts Commission's Bulletin No. 3, widely distributed, judiciously points out that "gonorrhœa, however, is not necessarily the cause of these symptoms; and as the law wisely deals with symptoms only, and not with diagnoses, neither nurses nor physicians should be afraid that, by obeying the law, they will put any stigma on the child's family."

But, somehow, in some way, let us make the parents realize that their blinded child is a disgrace which cannot be hidden. Dr.

<sup>16</sup> The best form in which the writer has seen the silver nitrate put up is a small, flat, dark-colored gelatin capsule, with a celluloid cap, which can be pierced with a sterilized needle. These small receptacles contain just enough for one application, and are put up in boxes of 10 each. (Prepared by Schieffelin & Co., of New York.)

Robert L. de Normandie, in speaking of this phase of the subject, courageously says: "If there is the slightest doubt of the parents' character, it is the State's duty to compel the infant's health to be safeguarded in every possible manner."

The latest word from Massachusetts announces the prosecution by the Boston Board of Health of four physicians failing to report cases of inflammation of the eyes in accordance with the law. Three were convicted. In March, 1910, the conviction and fine of a midwife in Cleveland, Ohio, was conducive of much good not only in revealing the power of the law to the woman's confreres, but in the wide publicity given the case through the press. Mothers in distant parts of the State appealed to the authorities for aid for their babies' "sore eyes." If, by prosecutions, convictions or other means, the reporting law can be kept before the public, no doubt much good will be accomplished.

Workers for prevention, however, feel that the root of the matter is not yet reached. The negligence of physicians and midwives in reporting their cases of birth infection has brought up the whole question of birth registration, which is most inadequate in the United States. A system of birth registration accounted reliable by the United States Census Bureau is maintained by eighteen States only. This so-called registration area covers but 55 per cent. of the population of the United States. The systems, or, rather, lack of systems, in the rest of the States and Territories would be difficult to match in any other civilized country. Most of the eighteen States referred to require the birth certificate to be sent to the Board of Health within ten days. Formerly, when records were required but quarterly, accumulations of birth certificates were sent to the recorder months after the birth of the child. Even now, with the ten-day limit, the death certificate is sometimes received before the birth is officially announced. Pennsylvania is the only State within our knowledge where the State Health Board's staff includes a birth registry inspector. This man is a field officer who investigates doubtful localities, endeavors to compare the infant population as he finds it with the neighboring registry office's records. If they fail to check up, he pursues his inquiries to locate the doctor or other attendant who omitted to send in the birth certificate. It can readily be understood that even a few cases probed to the discovery of the delinquents would have a stimulating effect on the

whole neighborhood. The Health Department of Pittsburg now employs such an inspector for that city alone.

The adoption and enforcement in every State of a ten-day limit for registration of births would be a distinct step in advance, and would give accurate figures for the compilation of statistics. If this requirement were coupled with a law making the use of a prophylactic compulsory and universal, ophthalmia neonatorum might soon cease to handicap our race. But while the first measure seems reasonably sure of materialization in the near future, the second seems less hopeful of achievement, and, as has already been shown, ophthalmia neonatorum may claim the eyesight, if not the life, of the next generation long before the expiration of the ten days!

The law requiring that birth infections of the eyes be reported to the health authorities does not strike deep enough; at best, it deals with the treatment and cure of the disease. We are committed not only to labor to prevent the loss of sight, but also to prevent the appearance of the causal disease. The free distribution of a prophylactic in the few States before noted is, perhaps, the entering wedge to its universal use, but at present the distribution acts principally in an educational way. How can we more effectively *prevent* infection without making compulsory the use of a prophylactic?

Two substitute measures suggest themselves:

First, earlier registration of births; *e. g.*, a twenty-four to thirty-six-hour limit for the receipt of the record at the office of the Board of Health. This plan has great merit in that the questions on the birth certificate may be in themselves a reminder of treatment while there is yet time. In the New York birth report the question is asked, "Did you employ a preventive for ophthalmia neonatorum? If not, why not?" In Indiana the query is inserted, "Were precautions taken against ophthalmia neonatorum?" Now, that health officers in each State are co-operating, similar questions will, doubtless, appear on the birth certificates in every State in the Union. With this early registration there is still time for the health authorities to send to the physicians and midwives warnings such as the data on the birth certificate demands. New York has secured a reduction in the time limit of birth registrations from ten days to thirty-six hours. This law obtains throughout the State, excepting New York City, Albany, Brooklyn and Yonkers. Some physicians in large cities where such reduction in time has been proposed

either feel themselves competent to handle the matter without the interference of the health authorities, or are so overburdened with their daily work that they resent the additional labor involved under the twenty-four to thirty-six-hour time limit.

To meet this objection on the part of the busy practitioner and to accomplish practically the same end, a second suggestion has been made, namely that the accoucheur should send to the health authorities a notification within twenty-four to thirty-six hours of the birth of a child; such notice might even be given by telephone. Dr. Cressy Wilbur, at the recent conference in New York, pointed out the value of such a proceeding, and made it clear that such notification was distinct from the registration containing detailed information, which would follow within ten days. The warning returned by the board of health after the receipt of notification could not be so specific as that which could be given after the receipt of the registration, with its definite question regarding ophthalmia neonatorum, but, as it is hardly possible that each case would receive individual inspection, the *early notification* would serve the purpose of *early registration*, in one respect; namely, to get the fact of the occurrence of a birth to the authorities promptly, that the board of health may expeditiously point out the danger of neglected "sore eyes," and call attention, likewise, to the other diseases which imperil the life and vitality of the infant.

But doctors object to being made responsible for the handing in of two certificates, however simple the first. A precedent which might be followed to reach an equitable solution of the matter is found in the English law, of August 28, 1907, Chapter XL, which places the responsibility for the early notification,<sup>17</sup> first, upon the father, and in case of his absence, upon the attendant. The justice of such an arrangement is self-evident. The primary cause of the disease, in the large majority of cases, is directly traceable to the father. The parents, not Providence, are responsible for the birth of the child, and also for the transmission of diseases which make the gift of life not a blessing, but a curse. The time for glossing over such facts is past. In our indictment for criminal carelessness and ignorance in the treatment of disease we must surely include, with the doctor and midwife, the parent.

<sup>17</sup> The suggested 24-hour postcard notification is not a substitute for subsequent registration.

In addition to giving the fact of the child's birth at a particular address, the notification should also state the language read by the family. The local board of health could then send by return mail a vividly set forth circular with simple statements printed in the appropriate language and calling attention to the symptoms of ophthalmia neonatorum and giving a warning that, without *prompt, expert medical care*, a child runs the risk of being blind. The early notification has another argument in its favor, for the same circular which serves to warn against ophthalmia neonatorum might also caution the mothers with regard to two other diseases—puerperal, or "child-birth," fever, and infection of the mother's breast, which, while not endangering the eyesight of the child, deprive him, if they go unchecked, of his best source of nutrition, thus rendering him less able to withstand the encroachments of disease. In this age of conservation, it would certainly seem as if our future citizens should receive as much protection at birth as is given them when disease has developed. Is it not time to bring the knowledge of such diseases out into the open and beseech the aid of the press, the pulpit, and the platform in attacking them vigorously? Shall not those of us who are fathers or mothers unite to protect our children from these insidious foes? The enforcement of a law in each State isolating syphilis and gonorrhœa as infectious, contagious diseases would mean real progress in the prevention of blindness. In the meantime let us not deceive ourselves. It is not alone the child known to have vicious surroundings who needs to be rescued—ALL CHILDREN need to be safeguarded by intelligent and noble teaching. The policy of purity through ignorance of evil is no longer tenable. Innocence of evil through knowledge purely imparted must be our slogan for the future.